WEST NILE VIRUS PREVENTION & CONTROL

To decrease exposure to mosquitoes and the infections they may carry:



Avoid spending time outside when mosquitoes are most active, especially at dawn and dusk.



When outdoors, wear long pants, long sleeve shirts and other protective clothing.



Apply insect repellent containing DEET according to label instructions.



Make sure that doors and windows have tight fitting screens. Repair or replace screens that have tears or holes.



Eliminate all sources of standing water on your property that can support mosquito breeding.



Contact your local mosquito and vector control agency if there is a significant mosquito problem where you live or work.

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WHAT IS THE CALIFORNIA **WEST NILE SURVEILLANCE** PROGRAM?

The California Department of Health Services (DHS) has overseen a statewide mosquitoborne encephalitis surveillance program since 1969 for western equine encephalitis (WEE), St. Louis encephalitis (SLE), and other viruses. In 2000, DHS and other agencies expanded the program to enhance the state's ability to detect WNV. A protocol to report and test dead birds was added to the existing surveillance system for encephalitis cases, mosquito testing, and monitoring of sentinel chickens.

Human Case Surveillance

Individuals who are ill should consult their health care provider. DHS and local public health departments provide testing for WNV. DHS can also provide testing for WEE and SLE. Health care providers should contact their local public health department to discuss requirements for testing.

Mosquito Testing

Mosquitoes throughout the state are sampled for the presence of WNV, WEE, and SLE viruses. Local mosquito and vector control agencies also monitor the abundance and type of mosquitoes.

Sentinel Chicken Testing

Over 200 chicken flocks are strategically placed throughout the state and are tested routinely during the mosquito season to detect evidence of infection from WNV, WEE, or SLE viruses. Chickens do not get sick from these viruses.

Animal Case Surveillance

Horses and ratites (e.g. emu and ostrich) with encephalitis are routinely tested for WNV, WEE, and SLE. Animal owners should consult their veterinarian if their animal is ill.

Dead Bird Surveillance

California began to test dead crows and related birds for WNV in 2000. Monitoring dead crows and other birds will help identify where the virus is occurring in California. State agencies, private organizations, and individuals participate in the surveillance program by reporting dead bird sightings. DHS arranges to collect the dead bird from the location it was found if WNV testing is appropriate.

AMERICAN CROW

American crows are found throughout most of California. They have entirely black plumage, black beak, and black feet. Adult size is 17-21 inches from tip of tail to tip of beak.

WHAT DO I DO IF I SEE A **DEAD BIRD?**



If you find a dead bird, particularly a crow, jay, magpie, raven, sparrow, finch, or raptor, please call the number below promptly. Do not touch the bird. DHS will record all dead bird reports and will arrange for pickup and laboratory testing for WNV when appropriate.

West Nile Virus Information and Dead Bird Reporting

Call Toll Free:

877-WNV-BIRD (877-968-2473)

E-mail: arbovirus@dhs.ca.gov

Website: http://www.westnile.ca.gov

Division of Communicable Disease Control California Department of Health Services

CALIFORNIA SURVEILLANCE AND FACTS ABOUT

West Nile Virus



2004





WHAT IS WEST NILE VIRUS?



West Nile virus (WNV) is a mosquito-borne virus that has been found in parts of Asia, eastern Europe, Africa, and the Middle East. The virus was first detected in the United States (U.S.) in 1999 in New York City.

The majority of people and animals infected with the virus will experience no symptoms, or a mild to moderate illness. In rare cases, the virus can cause a more serious condition called encephalitis, an inflammation of the brain. The elderly are at a higher risk for disease caused by WNV. In 2003, a total of 45 states detected WNV activity and over 9,300 human cases, including more than 240 deaths, were reported.

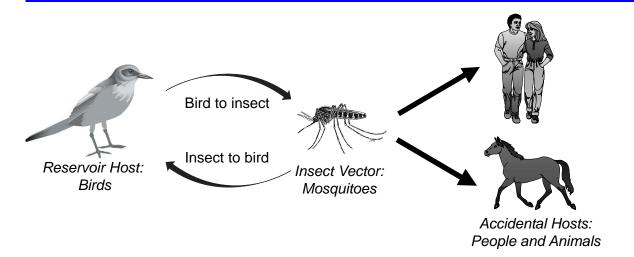
In 2003, WNV was detected in mosquitoes, wild birds, sentinel chickens, and a horse in six southern California counties. Three human WNV cases were also reported from southern California.

HOW DO PEOPLE AND ANIMALS GET WEST NILE VIRUS?

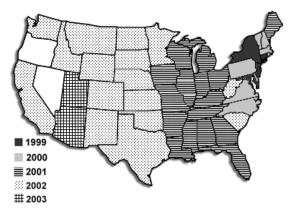
WNV is transmitted to people and animals by infected mosquitoes. Only certain species of mosquitoes carry the virus and very few mosquitoes are actually infected. A mosquito first acquires the infection by feeding on a bird with virus in its blood. The virus lives in the mosquito and is transmitted to a new host in the mosquito's saliva when the insect bites a person or animal. The virus is most prevalent from May to October when mosquitoes are most abundant.

Human-to-human transmission of WNV generally does not occur. However, human WNV infection has been associated with blood transfusions and organ transplants from infected donors. Blood donations in the U.S. are now screened for the presence of WNV.

TRANSMISSION CYCLE OF WEST NILE VIRUS



Spread of West Nile Virus in the United States 1999-2003



WHAT ARE THE SYMPTOMS OF WEST NILE VIRUS IN PEOPLE?

Many people who are infected with WNV have no symptoms. Approximately 15 percent of individuals who are infected develop an illness with fever, headache, nausea, body aches, skin rash, or swollen lymph nodes. In a smaller percent of individuals infected (<1%), a more severe illness (e.g. viral meningitis or encephalitis) may develop. These more severe illnesses often require hospitalization. The time between the mosquito bite and the onset of illness, known as the incubation period, ranges from 5-15 days in humans. Of the 9,300 confirmed human cases of WNV in the U.S. in 2003, 3 percent died. The elderly and immunocompromised are particularly susceptible to severe illness caused by WNV. There is no specific treatment for infection with WNV, although supportive care is important.

WHICH ANIMALS GET WEST NILE VIRUS?

An infected mosquito can bite any animal, but not all animals will become infected. The disease most often affects birds but may occasionally cause disease in other animals. Dogs and cats generally do not become ill from WNV.

Birds

Wild birds are the animals from which the mosquito vector primarily acquires the virus. Infection has been reported in more than 225 bird species. Although many birds that are infected with WNV will not appear ill, WNV infection can cause serious illness and death in some birds. The most severe illnesses are seen among the corvid birds, which include crows, jays, ravens, and magpies. American crows constitute the majority of birds reported dead due to WNV.

Horses

Like people, most horses bitten by mosquitoes will not become sick with WNV. However, of those that do,



signs may include stumbling, circling, hind leg weakness, inability to stand, muscle tremors, and death. A vaccine to prevent WNV illness in horses is available from your veterinarian. WNV vaccine and other vaccines against mosquito-borne diseases (western equine encephalitis and eastern equine encephalitis) should be given in the early spring. For more information on WNV and horses, please visit the website:

http://www.cdfa.ca.gov/ahfss/ah/wnv_info.htm.